EntryRAE

Confined Space Entry Multi-Gas Monitor

The EntryRAE personal gas monitor provides protection from the unexpected by adding a photoionization VOC (volatile organic compounds) detector to the traditional four-sensor configuration of a confined space monitor (O_2, %LEL, CO, and H_2S). The EntryRAE is reliable, easy to operate, and simple to calibrate, delivers added protection without added complexity.

- **Proven**
- **Versatile**
- **Simple to operate**
- **Easy to Calibrate**
- **Enhances protection without added complexity**

KEY FEATURES

Proven Performance

- Reliable, fast, and accurate PID sensor
- The self-cleaning feature reduces the frequency of PID sensor lamp cleanings
- Up to four additional sensors supported, including CO, H_2S, LEL and O_2
- Up to 16 hours of continuous operation
- Powerful pump allows sample draws from up to 100 feet (30 meters)
- Durable, weather-resistant rubber body
- Full datalogging (automatic)

Easy to Use

- Simple to operate, minimal training
- Easy, automatic calibration with AutoRAE Test and Calibration Station

Focused on Worker Protection

- Loud audible, vibration, and highly-visible red flashing LED alarm
- Low-flow pump alarm
- Large, easy-to-read display with auto-backlight

Versatile

- Suitable for a wide variety of applications involving confined space entry
- Interchangeable Lithium-ion and alkaline battery packs
- Charging cradle doubles as an external battery charger

APPLICATIONS

- Refineries
- Chemical processing
- Water and wastewater facilities
- Semiconductor manufacturing
- Rail car and tank truck cleaning
- Resin and nylon production
- Underground storage
- Sewer entries
- Utility vaults
- Agriculture

ISO 9001 CERTIFIED ATEX

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SPECIFICATIONS

Sensors Specifications

Sensor	Range	Resolution
PID	0-999 ppm VOC	1 ppm VOC
Oxygen	0-30.0%	0.1%
Combustible Gases	0-100% LEL 0-5% Volume	1% LEL 1% Volume
Carbon Monoxide	0-500 ppm	1 ppm
Hydrogen Sulfide	0-100 ppm	1 ppm

Detector Specifications

Size	5.9" L x 3.3" W x 1.9" H (15 x 8.3 x 4.8 cm) without clip
Weight	20 oz (567 g) with battery and clip
Sensors	**5 sensors:** • Protected catalytic bead for combustible gases (LEL) • Electrochemical sensors for oxygen (O_2) and hydrogen sulfide (H_2S) and carbon monoxide (CO) • Modular photoionization detector for broadband detection of VOCs using 10.6 eV lamp
Battery	• Drop-in rechargeable Li-ion battery pack • Standard alkaline battery adapter • Charging cradle doubles as external battery charger
Operating Hours	Up to 16 hours continuous with Li-ion (typical) Up to 12 hours with alkaline
Display	Large 1.4" x 1.8" (3.5 x 4.5 cm) display with automatic back-lighting in dim light or alarm condition
Keypad	Three-button operation
Direct Readout	• Oxygen as percentage by volume • Combustible gas as percentage of lower explosive limit (LEL), percentage by volume • VOCs, CO and H_2S as parts per million • TWA and STEL values for VOCs, CO and H_2S • High and low values for all gases
Alarms	• Audible (95dB at 30 cm), visible, and vibration • High: 3 beeps and flashes per second • Low: 2 beeps and flashes per second • STEL and TWA: 1 beep and flash per second • Low battery displays empty battery symbol, 1 beep per minute
EMI/RFI	Highly resistant to EMI / RFI. Compliant with EMC Directive 89/336/EEC
IP Rating	IP-55: protected against dust, protected against low pressure jets of water from all directions
Communication	PC to monitor via RS232 (USB adapter available)
Calibration	Two-point field calibration for zero and span gas
Sampling Pump	Built-in pump, 300 cc per minute flow rate
Low Flow Alarm	Auto shutoff at low-flow condition
Hazardous Area Approval	US/Canada: UL, cUL Class 1 Division 1, Groups A, B, C, D T3C Europe: ATEX II 2G EEx ia d IIC T4
Temperature	UL/cUL: -20° to 50°C; ATEX: -20° to 47°C
Humidity	0% to 95% relative humidity (non-condensing)
Attachments	Stainless-steel alligator clip (installed), wrist strap
Warranty	Lifetime on non-consuming components (per RAE Systems Standard Limited Warranty) 2 years for O_2, LEL, CO, and H_2S sensors, 1 year for PID, 1 year for pump and battery

*Specifications are subject to change

MONITOR ONLY INCLUDES:

- Monitor with sensors, as specified
- Li-ion rechargeable battery
- Alkaline battery adapter
- 5 external filters
- Charging cradle with 120 V or 230 V AC adapter
- ProRAE Studio software
- Computer interface cable
- Calibration adapter
- User manual
- Shipping case

OPTIONAL CALIBRATION KIT

- Hard transport case with pre-cut foam
- Sampling wand with 10 feet (3 meters) of self-coiling Teflon® tubing
- Tool kit
- Four-gas mix–34L (50% LEL, 20.9% O_2, 10 ppm, H_2S, 50 ppm CO)
- Isobutylene–34L (100 ppm, balance air)
- Regulators and tubing

TRUCK MOUNT (ACCESSORY)

- Cradle attachment for mounting on a wall plus a 12 V adapter

AUTORAE AUTOMATED BUMP TEST AND CALIBRATION SYSTEM

- Automatically calibrates and charges up to 10 instruments simultaneously

CORPORATE HEADQUARTERS

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